REMARKS

In the action of January 11, 2005, the examiner rejected claims 1-7 under 35 U.S.C 102 as anticipated by Lapin *et al*.

In response, please initially note the amendments to the title, the Summary of the Invention and the Abstract to indicate that the invention involves a product as opposed to a process per se. The process is the subject of U.S. Patent No. 6,485,306, which issued from the parent application.

Applicant respectfully traverses the examiner's rejection. Lapin discloses a method for making a three-dimensional object by applying light radiation to a layer of photo-sensitive resin in order to cure a defined area of the resin area. The uncured resin is then removed. The cavities left by the uncured resin are filled with hot wax, which is then milled to prepare it for the next layer. The sequence is repeated so that the object is built up layer by layer. The light to effect polymerization of each layer in sequence is applied directly to the photo-sensitive layers.

This is radically different than the product which is the subject matter of applicant's claims. In fact, the Lapin system is described as prior art in the Background of the Invention portion of the application. The disadvantages of such a system are described therein as well, including thickness limitations. The present invention was designed to overcome those disadvantages.

There are presently three independent claims in the application. Claim 1 is a product-by-process claim which includes the process step of exposing the photo-sensitive layer with a dose of light incident upon the second side of the substrate to produce polymerized regions of varying thickness within the photo-sensitive layer. The light is incident on the substrate as opposed to the photo-sensitive resin directly. The light proceeds through the substrate to the photo-sensitive layer. The result of this is a three-dimensional structure which has a varying thickness and a varying topography, produced by the incident light. Such product characteristics are not to be found in the Lapin three-dimensional products.

Note the clear difference between the Lapin product and the claimed product produced by the particular process steps set forth in the claim, in particular, the photo-sensitive epoxy is exposed by light to produce at least one region of polymerization of

varying thickness, *i.e.* the dose of light produces the varying thickness of the region/regions. The product structure of Lapin does not have individual regions which have varying thickness and topography produced by doses of light. The thickness of the each region, respectively, exposed by light in the manner described in Lapin remains the same over the entire region. Further, Lapin does not teach a 3-D structure with polymerized regions of continuously varying thickness and a smoothly varying topography, as set forth in claim 2. The claimed product, which is thus distinguished from the Lapin product, as required by MPEP Section 2113, is produced by the process steps set out in the claims, wherein the process steps impart the distinctive structural characteristics to the product set forth in claim 1 and discussed above.

The same is true for independent claims 3 and 5, both of which specify a three-dimensional article, in which photo-sensitive epoxy layers are polymerized from the substrate side, so as to produce regions of polymerized material on the other side of the substrate having varying thickness and varying topography.

Hence, all three independent claims are directed to a product which is not disclosed or made obvious by the Lapin reference, and which has distinctive structural characteristics, in particular, the varying thickness and topography of polymerized regions, which are produced as set forth in the claims.

In view of the above, allowance of the application is respectfully requested.

This is to request a one-month extension of time. Enclosed is the required fee of $60. The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account 07-1900.

Respectfully submitted,
JENSEN & PUNTIGAM, P.S.

By Clark A. Puntigam
Clark A. Puntigam, #25,763
Attorney for Applicant

CAP:rml
E-mail: clark@jensenpuntigam.com
Phone: 206 448-3200
Enclosures: Check, Postcard